

JS 44 (Rev. 12/07)

CIVIL COVER SHEET

The JS 44 civil cover sheet and the information contained herein neither replace nor supplement the filing and service of pleadings or other papers as required by law, except as provided by local rules of court. This form, approved by the Judicial Conference of the United States in September 1974, is required for the use of the Clerk of Court for the purpose of initiating the civil docket sheet. (SEE INSTRUCTIONS ON THE REVERSE OF THE FORM.)

I. (a) PLAINTIFFS

SPA SYSTRONIC AG

(b) County of Residence of First Listed Plaintiff Alpenstrasse, Switz.
(EXCEPT IN U.S. PLAINTIFF CASES)

(c) Attorney's (Firm Name, Address, and Telephone Number)

McCausland, Keen & Buckman, Radnor Court, Suite 160, 259
North Radnor-Chester Rd., Radnor, PA 19087/610.341.1000

DEFENDANTS

INFINEON TECHNOLOGIES NORTH AMERICA CORP. AND
INFINEON TECHNOLOGIES AG

County of Residence of First Listed Defendant

(IN U.S. PLAINTIFF CASES ONLY)

NOTE: IN LAND CONDEMNATION CASES, USE THE LOCATION OF THE
LAND INVOLVED.

Attorneys (If Known)

II. BASIS OF JURISDICTION (Place an "X" in One Box Only)

- ☐ 1 U.S. Government Plaintiff
- ☒ 3 Federal Question (U.S. Government Not a Party)
- ☐ 2 U.S. Government Defendant
- ☐ 4 Diversity (Indicate Citizenship of Parties in Item III)

III. CITIZENSHIP OF PRINCIPAL PARTIES (Place an "X" in One Box for Plaintiff and One Box for Defendant)

- | | | | | | |
|---|----------------------------|----------------------------|---|----------------------------|----------------------------|
| | PTF | DEF | | PTF | DEF |
| Citizen of This State | <input type="checkbox"/> 1 | <input type="checkbox"/> 1 | Incorporated or Principal Place of Business In This State | <input type="checkbox"/> 4 | <input type="checkbox"/> 4 |
| Citizen of Another State | <input type="checkbox"/> 2 | <input type="checkbox"/> 2 | Incorporated and Principal Place of Business In Another State | <input type="checkbox"/> 5 | <input type="checkbox"/> 5 |
| Citizen or Subject of a Foreign Country | <input type="checkbox"/> 3 | <input type="checkbox"/> 3 | Foreign Nation | <input type="checkbox"/> 6 | <input type="checkbox"/> 6 |

IV. NATURE OF SUIT (Place an "X" in One Box Only)

CONTRACT	TORTS	FORFEITURE/PENALTY	BANKRUPTCY	OTHER STATUTES
<input type="checkbox"/> 110 Insurance <input type="checkbox"/> 120 Marine <input type="checkbox"/> 130 Miller Act <input type="checkbox"/> 140 Negotiable Instrument <input type="checkbox"/> 150 Recovery of Overpayment & Enforcement of Judgment <input type="checkbox"/> 151 Medicare Act <input type="checkbox"/> 152 Recovery of Defaulted Student Loans (Excl. Veterans) <input type="checkbox"/> 153 Recovery of Overpayment of Veteran's Benefits <input type="checkbox"/> 160 Stockholders' Suits <input type="checkbox"/> 190 Other Contract <input type="checkbox"/> 195 Contract Product Liability <input type="checkbox"/> 196 Franchise	PERSONAL INJURY <input type="checkbox"/> 310 Airplane <input type="checkbox"/> 315 Airplane Product Liability <input type="checkbox"/> 320 Assault, Libel & Slander <input type="checkbox"/> 330 Federal Employers' Liability <input type="checkbox"/> 340 Marine <input type="checkbox"/> 345 Marine Product Liability <input type="checkbox"/> 350 Motor Vehicle <input type="checkbox"/> 355 Motor Vehicle Product Liability <input type="checkbox"/> 360 Other Personal Injury	PERSONAL INJURY <input type="checkbox"/> 362 Personal Injury - Med. Malpractice <input type="checkbox"/> 365 Personal Injury - Product Liability <input type="checkbox"/> 368 Asbestos Personal Injury Product Liability PERSONAL PROPERTY <input type="checkbox"/> 370 Other Fraud <input type="checkbox"/> 371 Truth in Lending <input type="checkbox"/> 380 Other Personal <input type="checkbox"/> 385 Property Damage Product Liability	<input type="checkbox"/> 610 Agriculture <input type="checkbox"/> 620 Other Food & Drug <input type="checkbox"/> 625 Drug Related Seizure of Property 21 USC 881 <input type="checkbox"/> 630 Liquor Laws <input type="checkbox"/> 640 R.R. & Truck <input type="checkbox"/> 650 Airline Regs. <input type="checkbox"/> 660 Occupational Safety/Health <input type="checkbox"/> 690 Other	<input type="checkbox"/> 422 Appeal 28 USC 158 <input type="checkbox"/> 423 Withdrawal 28 USC 157 PROPERTY RIGHTS <input type="checkbox"/> 820 Copyrights <input checked="" type="checkbox"/> 830 Patent <input type="checkbox"/> 840 Trademark
REAL PROPERTY <input type="checkbox"/> 210 Land Condemnation <input type="checkbox"/> 220 Foreclosure <input type="checkbox"/> 230 Rent Lease & Ejectment <input type="checkbox"/> 240 Torts to Land <input type="checkbox"/> 245 Tort Product Liability <input type="checkbox"/> 290 All Other Real Property	CIVIL RIGHTS <input type="checkbox"/> 441 Voting <input type="checkbox"/> 442 Employment <input type="checkbox"/> 443 Housing/Accommodations <input type="checkbox"/> 444 Welfare <input type="checkbox"/> 445 Amer. w/Disabilities - Employment <input type="checkbox"/> 446 Amer. w/Disabilities - Other <input type="checkbox"/> 440 Other Civil Rights	PRISONER PETITIONS <input type="checkbox"/> 510 Motions to Vacate Sentence Habeas Corpus: <input type="checkbox"/> 530 General <input type="checkbox"/> 535 Death Penalty <input type="checkbox"/> 540 Mandamus & Other <input type="checkbox"/> 550 Civil Rights <input type="checkbox"/> 555 Prison Condition	LABOR <input type="checkbox"/> 710 Fair Labor Standards Act <input type="checkbox"/> 720 Labor/Mgmt. Relations <input type="checkbox"/> 730 Labor/Mgmt. Reporting & Disclosure Act <input type="checkbox"/> 740 Railway Labor Act <input type="checkbox"/> 790 Other Labor Litigation <input type="checkbox"/> 791 Empl. Ret. Inc. Security Act IMMIGRATION <input type="checkbox"/> 462 Naturalization Application <input type="checkbox"/> 463 Habeas Corpus - Alien Detainee <input type="checkbox"/> 465 Other Immigration Actions	SOCIAL SECURITY <input type="checkbox"/> 861 HIA (1395ff) <input type="checkbox"/> 862 Black Lung (923) <input type="checkbox"/> 863 DIWC/DIWW (405(g)) <input type="checkbox"/> 864 SSID Title XVI <input type="checkbox"/> 865 RSI (405(g)) FEDERAL TAX SUITS <input type="checkbox"/> 870 Taxes (U.S. Plaintiff or Defendant) <input type="checkbox"/> 871 IRS—Third Party 26 USC 7609
				<input type="checkbox"/> 400 State Reapportionment <input type="checkbox"/> 410 Antitrust <input type="checkbox"/> 430 Banks and Banking <input type="checkbox"/> 450 Commerce <input type="checkbox"/> 460 Deportation <input type="checkbox"/> 470 Racketeer Influenced and Corrupt Organizations <input type="checkbox"/> 480 Consumer Credit <input type="checkbox"/> 490 Cable/Sat TV <input type="checkbox"/> 810 Selective Service <input type="checkbox"/> 850 Securities/Commodities/Exchange <input type="checkbox"/> 875 Customer Challenge 12 USC 3410 <input type="checkbox"/> 890 Other Statutory Actions <input type="checkbox"/> 891 Agricultural Acts <input type="checkbox"/> 892 Economic Stabilization Act <input type="checkbox"/> 893 Environmental Matters <input type="checkbox"/> 894 Energy Allocation Act <input type="checkbox"/> 895 Freedom of Information Act <input type="checkbox"/> 900 Appeal of Fee Determination Under Equal Access to Justice <input type="checkbox"/> 950 Constitutionality of State Statutes

V. ORIGIN

(Place an "X" in One Box Only)

- ☒ 1 Original Proceeding
- ☐ 2 Removed from State Court
- ☐ 3 Remanded from Appellate Court
- ☐ 4 Reinstated or Reopened
- ☐ 5 Transferred from another district (specify)
- ☐ 6 Multidistrict Litigation
- ☐ 7 Appeal to District Judge from Magistrate Judgement

VI. CAUSE OF ACTION

Cite the U.S. Civil Statute under which you are filing (Do not cite jurisdictional statutes unless diversity):

Brief description of cause:
Patent infringement pursuant to 35. U.S.C. § 1 et. seq.

VII. REQUESTED IN COMPLAINT:

☐ CHECK IF THIS IS A CLASS ACTION UNDER F.R.C.P. 23

DEMAND \$

CHECK YES only if demanded in complaint:

JURY DEMAND: ☒ Yes ☐ No

VIII. RELATED CASE(S) IF ANY

(See instructions):

JUDGE

DOCKET NUMBER

DATE

SIGNATURE OF ATTORNEY OF RECORD

9/4/09

[Signature]

FOR OFFICE USE ONLY

RECEIPT # _____ AMOUNT _____ APPLYING IFF _____ JUDGE _____ MAG. JUDGE _____

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF PENNSYLVANIA**

CASE MANAGEMENT TRACK DESIGNATION FORM

SPA SYSPATRONIC AG	:	CIVIL ACTION
	:	
v.	:	
	:	
INFINEON TECHNOLOGIES NORTH	:	
AMERICA CORPORATION and	:	
TECHNOLOGIES AG	:	NO.:

In accordance with the Civil Justice Expense and Delay Reduction Plan of this court, counsel for plaintiff shall complete a Case Management Track Designation Form in all civil cases at the time of filing the complaint and serve a copy on all defendants. (See § 1:03 of the plan set forth on the reverse side of this form.) In the event that a defendant does not agree with the plaintiff regarding said designation, that defendant shall, with its first appearance, submit to the clerk of court and serve on the plaintiff and all other parties, a Case Management Track Designation Form specifying the track to which that defendant believes the case should be assigned.

SELECT ONE OF THE FOLLOWING CASE MANAGEMENT TRACKS:

- (a) Habeas Corpus – Cases brought under 28 U.S.C. § 2241 through § 2255. ()
- (b) Social Security – Cases requesting review of a decision of the Secretary of Health and Human Services denying plaintiff Social Security Benefits. ()
- (c) Arbitration – Cases required to be designated for arbitration under Local Civil Rule 53.2. ()
- (d) Asbestos – Cases involving claims for personal injury or property damage from exposure to asbestos. ()
- (e) Special Management – Cases that do not fall into tracks (a) through (d) that are commonly referred to as complex and that need special or intense management by the court. (See reverse side of this form for a detailed explanation of special management cases.) ()
- (f) Standard Management – Cases that do not fall into any one of the other tracks. (X)

9/4/2009


Glenn S. Gitomer, Esq.

Plaintiff, SPA Syspatronic AG

DateAttorney-at-lawAttorney for(610) 341-1020(610) 341-1099ggitomer@mkbattorneys.com**Telephone****FAX Number****E-Mail Address**

FOR THE EASTERN DISTRICT OF PENNSYLVANIA — DESIGNATION FORM to be used by counsel to indicate the category of the case for the purpose of assignment to appropriate calendar.

Address of Plaintiff: SPA Syspatronic AG, Alpenstrasse 12, Zug CH-6304, Switzerland

Address of Defendant: Infineon Technologies North America Corporation, 1110 American Parkway N.E., Allentown, Pennsylvania 18109-9137; and Infineon Technologies AG, Am Campeon 1-12, 85579 Munich, Germany

Place of Accident, Incident or Transaction: National (patent infringement)

(Use Reverse Side For Additional

Space)

Does this civil action involve a nongovernmental corporate party with any parent corporation and any publicly held corporation owning 10% or more of its stock? (Attach two copies of the Disclosure Statement Form in accordance with Fed.R.Civ.P. 7.1(a)) Yes ☐ No ☒

Does this case involve multidistrict litigation possibilities?

Yes ☐ No ☒

RELATED CASE, IF ANY:

Case Number: Judge Date Terminated:

Civil cases are deemed related when yes is answered to any of the following questions:

1. Is this case related to property included in an earlier numbered suit pending or within one year previously terminated action in this court? Yes ☐ No ☐
2. Does this case involve the same issue of fact or grow out of the same transaction as a prior suit pending or within one year previously terminated action in this court? Yes ☐ No ☐
3. Does this case involve the validity or infringement of a patent already in suit or any earlier numbered case pending or within one year previously terminated action in this court? Yes ☐ No ☐
4. Is this case a second or successive habeas corpus, social security appeal, or pro se civil rights case filed by the same individual? Yes ☐ No ☐

CIVIL: (Place in ONE CATEGORY ONLY)

A. Federal Question Cases:

1. ☐ Indemnity Contract, Marine Contract, and All Other Contracts
2. ☐ FELA
3. ☐ Jones Act-Personal Injury
4. ☐ Antitrust
5. ☒ Patent
6. ☐ Labor-Management Relations
7. ☐ Civil Rights
8. ☐ Habeas Corpus
9. ☐ Securities Act(s) Cases
10. ☐ Social Security Review Cases
11. ☐ All other Federal Question Cases (Please specify)

B. Diversity Jurisdiction Cases:

1. ☐ Insurance Contract and Other Contracts
2. ☐ Airplane Personal Injury
3. ☐ Assault, Defamation
4. ☐ Marine Personal Injury
5. ☐ Motor Vehicle Personal Injury
6. ☐ Other Personal Injury (Please specify)
7. ☐ Products Liability
8. ☐ Products Liability — Asbestos
9. ☐ All other Diversity Cases (Please specify)

ARBITRATION CERTIFICATION

(Check Appropriate Category)

I, Glenn S. Gitomer, Esquire, counsel of record do hereby certify:

- ☐ Pursuant to Local Civil Rule 53.2, Section 3(c)(2), that to the best of my knowledge and belief, the damages recoverable in this civil action case exceed the sum of \$150,000.00 exclusive of interest and costs;
- ☐ Relief other than monetary damages is sought.

DATE: 9/4/2009


Glenn S. Gitomer, Esquire

Attorney-at-Law

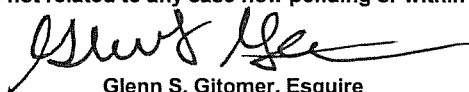
19287

Attorney I.D.#

NOTE: A trial de novo will be a trial by jury only if there has been compliance with F.R.C.P. 38.

I certify that, to my knowledge, the within case is not related to any case now pending or within one year previously terminated action in this court except as noted above.

DATE: 9/4/2009


Glenn S. Gitomer, Esquire

Attorney-at-Law

19287

Attorney I.D.#

AO 440 (Rev. 02/09) Summons in a Civil Action

UNITED STATES DISTRICT COURT

for the
Eastern District of Pennsylvania

SYS SYSPATRONIC AG

Plaintiff

v.

INFINEON TECHNOLOGIES NORTH AMERICA
CORP. AND INFINEON TECHNOLOGIES AG

Defendant

Civil Action No.

SUMMONS IN A CIVIL ACTION

To: *(Defendant's name and address)* Infineon Technologies AG
Am Campeon 1-12
85579 Munich, Germany

A lawsuit has been filed against you.

Within 20 days after service of this summons on you (not counting the day you received it) — or 60 days if you are the United States or a United States agency, or an officer or employee of the United States described in Fed. R. Civ. P. 12 (a)(2) or (3) — you must serve on the plaintiff an answer to the attached complaint or a motion under Rule 12 of the Federal Rules of Civil Procedure. The answer or motion must be served on the plaintiff or plaintiff's attorney, whose name and address are:

Glenn S. Gitomer, Esq.
McCAUSLAND, KEEN & BUCKMAN
Radnor Court, Suite 160
259 North Radnor-Chester Road
Radnor, PA 19087

If you fail to respond, judgment by default will be entered against you for the relief demanded in the complaint. You also must file your answer or motion with the court.

Michael E. Kunz
Clerk of Court

Date: _____

Signature of Deputy Clerk

AO 440 (Rev. 02/09) Summons in a Civil Action (Page 2)

Civil Action No. _____

PROOF OF SERVICE

(This section should not be filed with the court unless required by Fed. R. Civ. P. 4 (l))

This summons for *(name of individual and title, if any)* _____
was received by me on *(date)* _____.

☐ I personally served the summons on the individual at *(place)* _____
_____ on *(date)* _____; or

☐ I left the summons at the individual's residence or usual place of abode with *(name)* _____
_____, a person of suitable age and discretion who resides there,
on *(date)* _____, and mailed a copy to the individual's last known address; or

☐ I served the summons on *(name of individual)* _____, who is
designated by law to accept service of process on behalf of *(name of organization)* _____
_____ on *(date)* _____; or

☐ I returned the summons unexecuted because _____; or

☐ Other *(specify)*: _____
_____.

My fees are \$ _____ for travel and \$ _____ for services, for a total of \$ _____.

I declare under penalty of perjury that this information is true.

Date: _____

Server's signature

Printed name and title

Server's address

Additional information regarding attempted service, etc:

AO 440 (Rev. 02/09) Summons in a Civil Action

UNITED STATES DISTRICT COURT

for the
Eastern District of Pennsylvania

SPA SYSPATRONIC AG

Plaintiff

v.

INFINEON TECHNOLOGIES NORTH AMERICAN
CORP. AND INFINEON TECHNOLOGIES AG

Defendant

)
)
)
) Civil Action No.
)
)
)

SUMMONS IN A CIVIL ACTION

To: *(Defendant's name and address)* Infineon Technologies North America Corporation
1110 American Parkway NE
Allentown, PA 18109-9137

A lawsuit has been filed against you.

Within 20 days after service of this summons on you (not counting the day you received it) — or 60 days if you are the United States or a United States agency, or an officer or employee of the United States described in Fed. R. Civ. P. 12 (a)(2) or (3) — you must serve on the plaintiff an answer to the attached complaint or a motion under Rule 12 of the Federal Rules of Civil Procedure. The answer or motion must be served on the plaintiff or plaintiff's attorney, whose name and address are:

Glenn S. Gitomer, Esq.
McCAUSLAND, KEEN & BUCKMAN
Radnor Court, Suite 160
259 North Radnor-Chester Road
Radnor, PA 19087

If you fail to respond, judgment by default will be entered against you for the relief demanded in the complaint. You also must file your answer or motion with the court.

Michael E. Kunz
Clerk of Court

Date: _____

Signature of Deputy Clerk

AO 440 (Rev. 02/09) Summons in a Civil Action (Page 2)

Civil Action No. _____

PROOF OF SERVICE

(This section should not be filed with the court unless required by Fed. R. Civ. P. 4 (l))

This summons for *(name of individual and title, if any)* _____
was received by me on *(date)* _____.

☐ I personally served the summons on the individual at *(place)* _____
on *(date)* _____; or

☐ I left the summons at the individual's residence or usual place of abode with *(name)* _____
_____, a person of suitable age and discretion who resides there,
on *(date)* _____, and mailed a copy to the individual's last known address; or

☐ I served the summons on *(name of individual)* _____, who is
designated by law to accept service of process on behalf of *(name of organization)* _____
on *(date)* _____; or

☐ I returned the summons unexecuted because _____; or

☐ Other *(specify)*: _____
_____.

My fees are \$ _____ for travel and \$ _____ for services, for a total of \$ _____.

I declare under penalty of perjury that this information is true.

Date: _____

Server's signature

Printed name and title

Server's address

Additional information regarding attempted service, etc:

**UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF PENNSYLVANIA**

SPA SYSPATRONIC AG,

Plaintiff,

V.

INFINEON TECHNOLOGIES NORTH
AMERICA CORPORATION and INFINEON
TECHNOLOGIES AG,

Defendant.

Σ

Civil Action No.

RULE 7.1 DISCLOSURE STATEMENT OF SPA SYSPATRONIC AG

Pursuant to Rule 7.1 of the Federal Rules of Civil Procedure, the undersigned counsel for SPA Syspatronic AG certifies that SPA Syspatronics AG has no parent corporation and, there is no publicly held company that owns 10% or more of the stock of SPA Syspatronic AG.

Respectfully submitted,

MCCAUSLAND, KEEN & BUCKMAN
Attorneys for Plaintiff SPA Syspatronic AG

Dated: September 4, 2009

By:

Glenn S. Gitomer
Attorney I.D. No. 19287
Radnor Court, Suite 160
259 North Radnor-Chester road
Radnor, PA 19087
Tel: 610.341.1000

**UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF PENNSYLVANIA**

SPA SYSPATRONIC AG,

Plaintiff,

V.

INFINEON TECHNOLOGIES NORTH
AMERICA CORPORATION and INFINEON
TECHNOLOGIES AG,

Defendants.

100

Civil Action No.

COMPLAINT AND DEMAND FOR TRIAL BY JURY

Plaintiff SPA Syspatronic AG hereby alleges and avers as follows:

JURISDICTION AND VENUE

1. This action is for patent infringement arising under the patent laws of the United States, 35 U.S.C. §§ 1 *et seq.* Subject matter jurisdiction is conferred upon this Court under 28 U.S.C. §§ 1331 and 1338(a).

2. Venue is proper in this judicial district under 28 U.S.C. §§ 1391(b), 1931(c), and 1400(b).

PARTIES

3. The plaintiff SPA Syspatronic AG ("SPA") is a corporation of Switzerland, having its principal place of business at Alpenstrasse 12, Zug CH-6304, Switzerland.

4. Upon information and belief, defendant Infineon Technologies North America Corporation is a corporation of Delaware, having a place of business at 1110 American Parkway N.E., Allentown, Pennsylvania 18109-9137, and is doing business in and is therefore a resident of this judicial district.

5. Upon information and belief, defendant Infineon Technologies AG is a corporation of the Federal Republic of Germany, having a place of business at Am Campeon 1-12, 85579 Munich, Germany, and has transacted business in the United States and in this judicial district by and through its wholly owned subsidiaries, including Infineon Technologies North America Corporation.

BACKGROUND

6. On January 15, 1991, the United States Patent and Trademark Office duly and legally issued United States Patent No. 4,985,921 by Schwartz ("the '921 Patent") for an invention entitled "Portable Data Carrying Device." A copy of the '921 Patent is attached as Exhibit A.

7. On October 28, 2008, the United States Patent and Trademark Office duly and legally issued an *ex parte* reexamination certificate for the '921 Patent ("the '921 Reexam Certificate"). A copy of the '921 Reexam Certificate is attached hereto as Exhibit B.

8. SPA is the owner by assignment of the '921 Patent and '921 Reexam Certificate, and has the right to sue and recover damages for infringement thereof.

9. Upon information and belief, defendants are engaged in the design, development, manufacture, and sale of integrated circuit chips for use in, *inter alia*, U.S. passports, credit cards, identification cards, cellular telephones, and other portable data-carrying devices.

FIRST CLAIM FOR RELIEF

Infringement Of The '921 Patent

10. SPA reasserts and realleges the foregoing paragraphs 1-9 as if fully set forth herein.

11. Upon information and belief, defendants have directly infringed, and/or contributorily infringed, and/or induced infringement of the '921 Patent by making, using, selling and offering to sell integrated circuit chips within the scope of the '921 Patent.

12. Upon information and belief, defendants had actual knowledge of the '921 Patent and proceeded to infringe the '921 Patent without a good-faith basis for believing that their products did not infringe or that the '921 Patent was invalid, thereby rendering their infringement willful.

13. The foregoing acts of patent infringement by the defendants have caused injury and damage to SPA.

SECOND CLAIM FOR RELIEF

Infringement Of The '921 Reexam Certificate

14. SPA reasserts and realleges the foregoing paragraphs 1-13 as if fully set forth herein.

15. Upon information and belief, defendants have directly infringed, and/or contributorily infringed, and/or induced infringement of the '921 Reexam Certificate by making, using, selling, and offering to sell integrated circuit chips within the scope of the '921 Reexam Certificate

16. Upon information and belief, after reasonable opportunity for further investigation and discovery, it is likely that SPA will develop evidentiary support that defendants had actual knowledge of the '921 Reexam Certificate and proceeded to infringe the '921 Reexam Certificate without a good-faith basis for believing that their products did not infringe or that the '921 Reexam Certificate was invalid, thereby rendering their infringement willful.

17. The foregoing acts of patent infringement by the defendants have caused injury and damage to SPA.

PRAYER FOR RELIEF

WHEREFORE, SPA prays for the following relief and an entry of judgment from this Court:

- A. Holding that defendants have infringed one or more of the claims of the '921 Patent and/or the '921 Reexam Certificate;
- B. Awarding compensatory damages to SPA;
- C. Holding that defendants have willfully infringed one or more claims of the '921 Patent and/or the '921 Reexam Certificate and trebling the compensatory damages under 35 U.S.C. § 284;
- D. Finding that this action is an "exceptional" case within the meaning of 35 U.S.C. § 285, and awarding SPA its reasonable attorney fees and expense;
- E. Awarding costs to SPA; and
- F. Such other relief as this Court deems necessary and just.

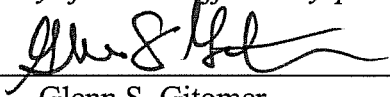
JURY DEMAND

Pursuant to Fed. R. Civ. P. 38(b), plaintiffs hereby demand a trial by a jury on all issues so triable.

Respectfully submitted,

McCAUSLAND, KEEN & BUCKMAN
Attorneys for Plaintiff SPA Syspatronic AG

Dated: September 4, 2009

By: 
Glenn S. Gitomer
Attorney I.D. No. 19287
Radnor Court, Suite 160
259 North Radnor-Chester Road
Radnor, PA 19087
Tel: 610.341.1000

OF COUNSEL
Charles P. Kennedy
Robert B. Cohen

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KRUMHOLZ & MENTLIK, LLP
600 South Avenue West
Westfield, NJ 07090-1497
Tel: 908.654.5000
Fax: 908.654.7866

EXHIBIT A

United States Patent [19]

Schwartz

[11] Patent Number: **4,985,921**
 [45] Date of Patent: **Jan. 15, 1991**

[54] PORTABLE DATA CARRYING DEVICE

[75] Inventor: **Hermann Schwartz, Pfäffikon, Switzerland**

[73] Assignee: **SPA Syspatronic AG, Zug, Switzerland**

[21] Appl. No.: **333,646**

[22] Filed: **Apr. 5, 1989**

[30] Foreign Application Priority Data

Apr. 11, 1988 [CH] Switzerland 01323/88

[51] Int. Cl.⁵ **H04L 9/00**

[52] U.S. Cl. **380/24; 235/380**

[58] Field of Search **380/24; 235/380, 382.5**

[56] References Cited

U.S. PATENT DOCUMENTS

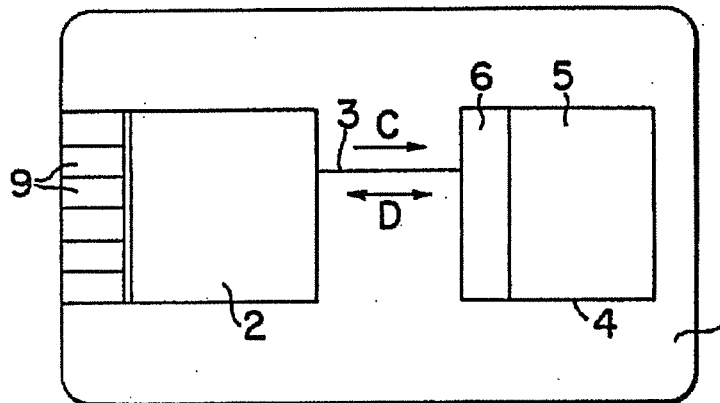
4,453,074	6/1984	Weinstein	380/24
4,575,621	3/1986	Dreifus	380/24
4,799,061	1/1989	Abraham et al.	380/24
4,823,388	4/1989	Mizutani et al.	380/24
4,827,512	5/1989	Hirokawa et al.	380/24

Primary Examiner—Thomas H. Tarcza
 Assistant Examiner—David Cain

[57] ABSTRACT

With portable data carrying devices, which are intended for the required connection (for example by means of contacts 9) to an external read/write unit in a data exchange system and which contain besides a control unit (2) an additional data memory (5) (both implemented as integrated circuits), a high level of security should be achieved against access to the stored data and manipulations without authorization. For this purpose entry to the additional data memory (5) from the control unit (2) is protected. Various possibilities are specified such as access coding, cryptographic circuit means and methods or secret microcodes. The data carrying device (1) can be implemented with two or more separate integrated circuit components interconnected by a multiple conductor strip (3) (multi-chip), or with all functional units integrated on a common carrier (single chip).

7 Claims, 1 Drawing Sheet



United States Patent [19]**Schwartz**[11] **Patent Number:** **4,985,921**[45] **Date of Patent:** **Jan. 15, 1991**[54] **PORTABLE DATA CARRYING DEVICE**[75] **Inventor:** Hermann Schwartz, Pfäffikon,
Switzerland[73] **Assignee:** SPA Syspatronic AG, Zug,
Switzerland[21] **Appl. No.:** 333,646[22] **Filed:** Apr. 5, 1989[30] **Foreign Application Priority Data**

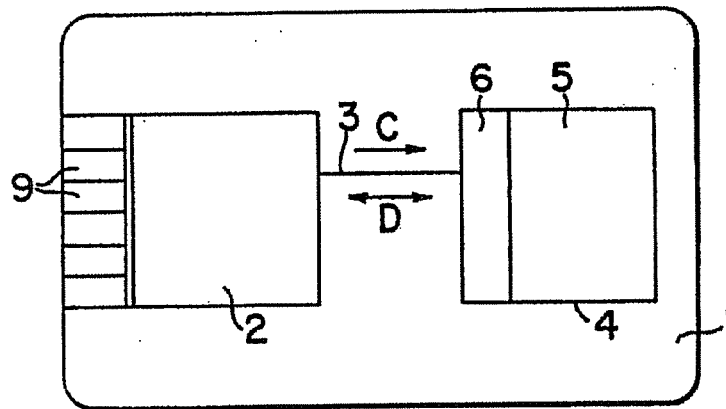
Apr. 11, 1988 [CH] Switzerland 01323/88

[51] **Int. Cl.³** H04L 9/00[52] **U.S. Cl.** 380/24; 235/380[58] **Field of Search** 380/24; 235/380, 382.5[56] **References Cited****U.S. PATENT DOCUMENTS**

4,453,074	6/1984	Weinstein	380/24
4,575,621	3/1986	Dreifus	380/24
4,799,061	1/1989	Abraham et al.	380/24
4,823,388	4/1989	Mizutani et al.	380/24
4,827,512	5/1989	Hirokawa et al.	380/24

Primary Examiner—Thomas H. Tarcza
Assistant Examiner—David Cain[57] **ABSTRACT**

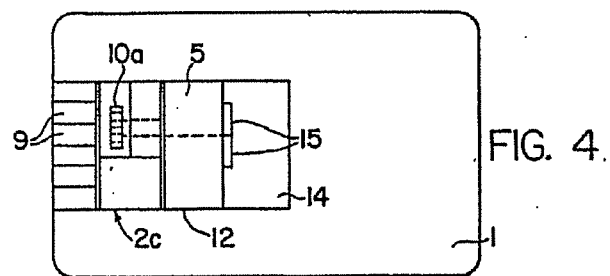
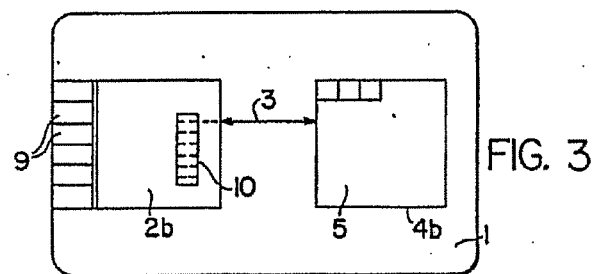
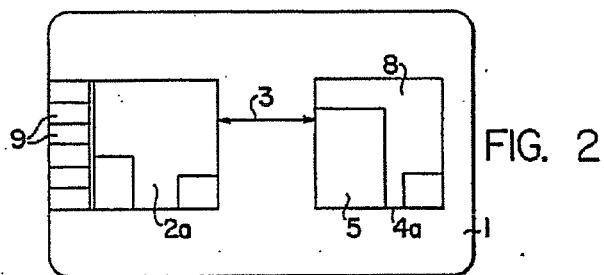
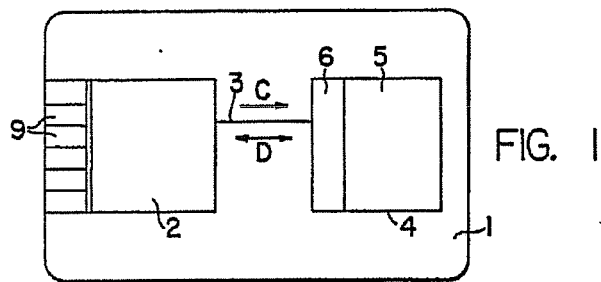
With portable data carrying devices, which are intended for the required connection (for example by means of contacts 9) to an external read/write unit in a data exchange system and which contain besides a control unit (2) an additional data memory (5) (both implemented as integrated circuits), a high level of security should be achieved against access to the stored data and manipulations without authorization. For this purpose entry to the additional data memory (5) from the control unit (2) is protected. Various possibilities are specified such as access coding, cryptographic circuit means and methods or secret microcodes. The data carrying device (1) can be implemented with two or more separate integrated circuit components interconnected by a multiple conductor strip (3) (multi-chip), or with all functional units integrated on a common carrier (single chip).

7 Claims, 1 Drawing Sheet

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Jan. 15, 1991

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PORTABLE DATA CARRYING DEVICE

BACKGROUND OF THE INVENTION

The invention consists of a portable data carrying device containing a control unit and an additional data memory, each of which is implemented as a integrated circuit. The control unit is provided with means for making connection with an external read/write unit.

Data exchange and data processing systems with a multiple of such portable data carrying devices are well known. The data carrying devices are interconnected as needed for individual uses with a read/write unit in order to communicate with the system. The data carrying devices of the referenced type, which are equipped with a control unit in addition to a sufficient memory capacity, make possible not only an interactive data and signal exchange with the system, but also decentralized data processing and storage in the individual "intelligent" data carrying devices. Such data carrying devices result in extremely versatile and highly developed application possibilities. Such data carrying devices are typically put to use in card form (in credit card format with embedded integrated circuit architecture (so-called "chip cards"). Accordingly, although the data carriers are predominantly referred to hereinafter as "cards", other embodiments should nonetheless not be excluded.

In practically all applications of such data exchange systems one of the most important prerequisites is the security against manipulation and misuse or unauthorized access to the stored and transmitted information, indeed with the "fixed" system components as well as the transportable data carriers. High security requirements exist for the latter in particular on account of their wide distribution (possibility of loss or theft), but also—with "built-in intelligence"—on account of the voluminous stored data therein as well as the stored electronic encoding, as these are necessary for the protected data communication with read/write units (identification and authentication functions).

SUMMARY OF THE INVENTION

Accordingly an object of the foregoing invention is the protection of a portable data carrier of the foregoing type against access and decoding or correspondingly interpretation of the relevant safeguarded data and information stored therein by unauthorized third parties. This object is achieved according to the present invention in that in the referenced data carrying device entry to the additional data memory by the control unit is protected. The protected entry is permitted to be accomplished—as described further below—in various manners through integrated cryptographic circuit means or methods. In this manner improper access to the individual data carrying devices is effectively prevented.

Specially adapted variations of the invention are disclosed. It is to be particularly noted that the invention is employed independently of whether the integrated circuitry of a data carrying device ("card") is split between two or more components connected by conductors or is combined on a single carrier (so-called multi-chip—or single chip configurations). The invention therefore makes possible the extension of the memory capacity of additional chips as well as the application of complex

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chips with the preservation of the "internal" security of the data carrying device.

BRIEF DESCRIPTION OF THE DRAWINGS

Further features of the invention can be derived from the various embodiments in the following description in combination with the drawings.

FIG. 1 illustrates a portable data carrying device in accordance with the present invention with a control unit and a data memory requiring an access code.

FIG. 2 illustrates another embodiment of the portable data carrying device with separate microprocessors for encryption of data exchanges.

FIG. 3 illustrates another embodiment of the portable data carrying device which utilizes a secret microcode to secure data exchange.

FIG. 4 illustrates still a further embodiment of the portable data carrying device utilizing a microcode within a single chip to secure data exchange.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

FIGS. 1-4 are schematic illustrations of the data carrying cards, in particular plastic cards with embedded integrated semi-conductor circuits ("chips"), wherein the latter are illustrated greatly enlarged and simplified in relation to the card format with the circuitry or, correspondingly, functional areas arranged thereon. It should be understood that the layout of these circuits—extent and design of the individual regions—can be varied according to each application.

In FIG. 1 a plastic card is illustrated as a data carrying device in which two integrated semi-conductor circuit components ("chips") 2 and 4 are set. The component 2 comprises the control unit of the data carrying device and is connected to an external contact 9 of the card 1 for the purpose of connecting to an external (not illustrated) read/write unit of the data exchange system. The connections for the external unit can also be produced in other manners than the galvanized contact, for example, by known means with an inductive coupling and so forth. The control unit 2 preferably comprises a microprocessor with a computer and RAM- and ROM-storage areas as well as additionally a data memory region. An additional data memory 5 exists on the second component 4. The connection between the two components 2 and 4 is produced by means of a multiple conductor strip 3. For technical assembly reasons, it may be useful to combine the components 2 and 4 with the conductor strip 3 and if necessary the external contact 9 into a common module for the construction in the plastic card 1.

An external connection to the control unit 2 can only be made by means of the contact 9 so that an exchange of sensitive data between the card and the system in a known fashion can only come about after successful authentication and identification, which functions are participated in by the control unit. The data exchange is produced also however within the card between the components 2 and 4 by however within the card between the components 2 and 4 by means of the conductor strip 3. In order to prevent manipulation and unauthorized access to the data memory 5, entry to this memory is protected by the control unit 2. For example according to FIG. 1, an access code region 6 is associated with the data memory 5 for this purpose. In this manner the memory is accessible only by means of a code signal C which is produced by the control unit 2,

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that is, data exchange D between the components 2 and 4 is only possible after successful decoding of the code region 6. Also, the data exchange within the component 2 between the control unit and a data memory existing there is produced in a similarly protected manner, although not further illustrated. Such protected data exchange processes are produced within the data carrying device 1 with a certain degree of self-sufficiency without participation of external system parts (naturally apart from the current supplied over the contacts 9). The access in particular to the sensitive data in the data memory 5 is thereby protected by means of a barrier which can only be overcome by means of key codes (key lock) employed within the card. In this manner the security can substantially be enhanced so that in the microprocessor of the control unit 2 new access codes can always be generated, for example after each successful access to the additional data memory. memories). The implementation of the additional memory 5 is possible as a serial memory with comparative logic and with a minimum number of connecting conductors 3 between the components 2 and 4.

In the embodiment according to FIG. 2, the general construction of the data carrying card 1 with the integrated circuit components 2a, 4a interconnected by means of the conductor strip 3 is the same as in FIG. 1. The control unit 2a connected with the external contacts 9 similarly comprises a microprocessor and a data memory region. On the other hand, the component 4a contains besides the additional memory 5 likewise a microprocessor 8. Whereby still further possibilities with respect to applications and security are achieved. With the help of a microprocessor 8 it is possible not only to secure entry to the data memory 5 from the control unit 2 as in FIG. 1 and with it the unauthorized reading of data from the memory 5, but also beyond this to secure the entire data exchange over the conductors 3, that is, to accomplish this in coded or decoded form. However, the double-pass entry system is only possible after a successful cryptographic authentication from the opposite pas which again is only produced, "within the card", that is, without participation of external system parts.

The general construction in the example according to FIG. 3 with a control unit 2b and an additional data memory 4b in the form of separate integrated circuits corresponds again to the foregoing examples. A protected entry to the additional data memory 5 is realized in this embodiment again in another manner, namely in that the microcode of the control unit 2b, designated 10, is secret. Of course, a well known microprocessor can be employed in the control unit 2b and this microprocessor can be based upon an "uncommon" microcode 10 only known to the manufacturer and therefore secret. In this manner an unauthorized access to the data stored in the data carrier or correspondingly a decoding of the information exchanged over the conductors 3 is rendered impossible, even if there was success in getting through the multiple conductor strip 3.

In contrast to the above described embodiments, the data carrying device or correspondingly the plastic card 1 according to FIG. 4 contains one individual semi-conductor component 12, on which the control unit 2c, the additional data memory 5 as well as further circuit regions are in total implemented in an integrated circuit configuration. In a manner similar to the example according to FIG. 3, the microcode 10a in the microprocessor of the control unit 2c is secret so that entry to the additional data memory 5 is again protected ("mechanical" access on the conductors between the

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regions of the integrated circuit on one and the same carrier would naturally however be considerably more difficult than on the conductors 3 which are laid within the plastic card 1 or correspondingly within a module which consists of the two separate components 2 and 4).

With the computer in the microprocessor of the control unit 2c there exists further an additional computer 14 in combination with registers 15 which are likewise positioned on the carrier 12. As indicated the registers 15 are likewise coordinated with the secret microcodes 10a of the control unit 2c, that is, the signal exchange between the control unit 2c and the additional computer 14 is produced likewise on the basis of the secret codes. One such additional calculator 14 makes possible the execution of especially highly developed cryptographic methods within the portable data carrying device, that is, without requiring external calculating capacity and thereby particular data exchanges with external system parts. This means that the application of the secret microcodes 10a remains restricted to the integrated circuits of the single carrier 12 in the data carrying device whereby high level security against manipulation and unauthorized access is achieved.

What is claimed is:

1. A portable data carrying device comprising a control unit and an additional data memory which are each implemented as integrated circuits, wherein the control unit is provided with means for placing it in communication with an external read/write device characterized in that entry into the additional data memory (5) by the control unit (2) is protected by coding means which is in the carrying device and is operative to permit entry into the additional data memory (5) without participation of system parts external to the carrying device.

2. A portable data carrying device according to claim 1 characterized in that the data memory (5) contains an access code region and the code means includes means within the control unit (2) for producing a code signal (C) for entry to the data memory through the access code region.

3. A portable data carrying device according to claim 1, characterized in that the code means includes a processor (8) associated with the data memory (5) for a secure (coded or decoded) data exchange with the control unit (2a).

4. A portable data carrying device according to claim 1, characterized in that the code means includes means within the control unit (2b) for producing a secret microcode for communications between the control unit and the data memory.

5. A portable data carrying device according to claim 4, characterized in that an additional computer (14) is established in combination with the computer of the control unit (2c), the additional computer (14) having a register (15) coordinated with the microcode (10a) of the control unit (2c).

6. A portable data carrying device according to claim 1 characterized in that the control unit and the additional data memory are implemented as separate integrated circuits (2, 4) which are placed in communication with one another by means of a multiple conductor strip (3) within the data carrying device (1).

7. A portable data carrying device according to claim 1, characterized in that the control unit (2), the additional data memory (5) together with further regions (6, 8, 14, 15) in total are implemented in a totally integrated circuit construction on the same carrier (12).

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EXHIBIT B



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(12) **EX PARTE REEXAMINATION CERTIFICATE** (6488th)
United States Patent
Schwartz

(10) Number: **US 4,985,921 C1**(45) Certificate Issued: **Oct. 28, 2008**(54) **PORTABLE DATA CARRYING DEVICE**

5,153,581 A 10/1992 Hazard 340/5.8

(75) Inventor: **Hermann Schwartz, Pfäffikon (CH)****FOREIGN PATENT DOCUMENTS**(73) Assignee: **SPA Syspatronic AG, Zug (CH)****Reexamination Request:**

No. 90/007,952, Feb. 28, 2006

Reexamination Certificate for:

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(30) **Foreign Application Priority Data**

Apr. 11, 1988 (CH) 01323/88

(51) Int. Cl. **G07F 7/10** (2006.01)(52) U.S. Cl. **713/193; 235/380; 705/65; 713/159; 713/172**(58) **Field of Classification Search** None
See application file for complete search history.**OTHER PUBLICATIONS**

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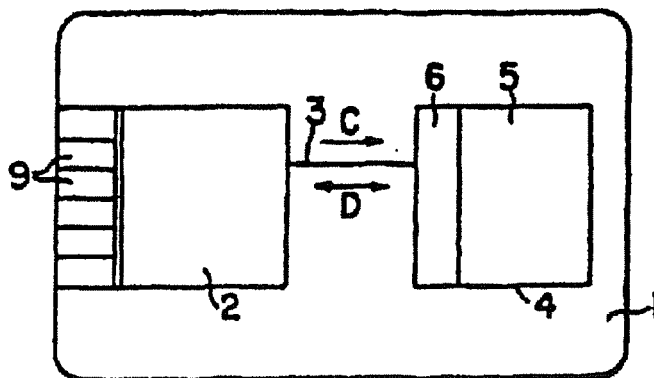
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Primary Examiner—Joseph R Pokrzywa(57) **ABSTRACT**

With portable data carrying devices, which are intended for the required connection (for example by means of contacts 9) to an external read/write unit in a data exchange system and which contain besides a control unit (2) an additional data memory (5) (both implemented as integrated circuits), a high level of security should be achieved against access to the stored data and manipulations without authorization. For this purpose entry to the additional data memory (5) from the control unit (2) is protected. Various possibilities are specified such as access coding, cryptographic circuit means and methods or secret microcodes. The data carrying device (1) can be implemented with two or more separate integrated circuit components interconnected by a multiple conductor strip (3) (multi-chip), or with all functional units integrated on a common carrier (single chip).



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**EX PARTE
REEXAMINATION CERTIFICATE
ISSUED UNDER 35 U.S.C. 307**

THE PATENT IS HEREBY AMENDED AS
INDICATED BELOW.

Matter enclosed in heavy brackets [] appeared in the patent, but has been deleted and is no longer a part of the patent; matter printed in italics indicates additions made to the patent.

AS A RESULT OF REEXAMINATION, IT HAS BEEN DETERMINED THAT:

Claim 1 is cancelled.

New claims 8-13 are added and determined to be patentable.

Claims 2-7 were not reexamined.

8. A portable data carrying device comprising a control unit and an additional data memory which are each implemented as integrated circuits, wherein the control unit is provided with means for placing it in communication with an external read/write device characterized in that entry into the additional data memory (5) by the control unit (2) is protected by coding means which is in the carrying device and is operative to permit entry into the additional data memory (5) without participation of system parts external to the carrying device, and wherein the control unit and the additional data memory are operative to exchange information in encrypted form.

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9. A portable data carrying device according to claim 8, characterized in that the data memory contains an access code region and the coding means includes means within the control unit for producing a code signal for entry to the data memory through the access code region.

10. A portable data carrying device according to claim 8, characterized in that the coding means includes means within the control unit for producing a secret microcode for communications between the control unit and the data memory.

11. A portable data carrying device according to claim 10, characterized in that an additional computer is established in combination with a computer of the control unit, the additional computer having a register coordinated with the microcode of the control unit.

12. A portable data carrying device according to claim 8, characterized in that the control unit and the additional data memory are implemented as separate integrated circuits which are placed in communication with one another by means of a multiple conductor strip within the data carrying device.

13. A portable data carrying device according to claim 8, characterized in that the control unit, the additional data memory and further regions are implemented collectively in an integrated circuit construction on a single carrier.

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